Press Release:

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SCIENTISTS REVEAL HIGHLY-DETAILED IMAGERY OF CALIFORNIA SEAFLOOR

Half Moon Bay, Calif. – The California Ocean Protection Council and National Oceanic and Atmospheric Administration (NOAA) National Marine Sanctuary Program today announced findings revealing unprecedented detailed imagery of the seafloor, including in areas of the Monterey Bay National Marine Sanctuary off Half Moon Bay, where the famed "Mavericks" waves are among the largest in the Continental United States.

The *California Coast State Waters Mapping Project* allows scientists for the first time to see highly detailed, three-dimensional images of the seafloor off California's coast. New data illustrates the rugged seafloor conditions surrounding Mavericks more clearly and helps better explain ocean ecosystems and underwater activities like large waves and earthquakes.

"This type of cutting-edge research is essential to understanding the unique aspects of our national marine sanctuaries," said Gulf of the Farallones National Marine Sanctuary Superintendent Maria Brown. "The marine sanctuary will use these images to educate future ocean scientists and foster citizen stewardship."

Using advanced sonar equipment called shipboard multibeam echo sounders and aerial light detection bathymetric sensing instruments, detailed underwater pictures were produced. The images distinguish critical underwater habitats and highlight the faults, chasms, fissures, crevices, and pinnacles on the sea floor. Scientists and resource managers will use the information to identify potential biological hot spots to aid their understanding of the highly productive, diverse undersea ecosystem along the California coast.

"This research is extremely valuable in identifying areas important to the Marine Life Protection Act process and could simultaneously help to predict seismic hazards along California's coast," said Secretary for Resources Mike Chrisman, chair of the Ocean Protection Council.

Also significant is the survey's charting of navigational hazards such as hidden reefs and sunken obstacles. Knowing where hazards are located is essential for the safety of vessels that use these waters each year. This is the first time scientists have been able to show the shallow nearshore reef in such detail.

Geologic hazards along the seismically active California coast have also been identified. The survey documents the position and physical features associated with the marine

segments of the San Gregorio fault in the Half Moon Bay Area, a major active fault within the San Andreas Fault System.

The project is a collaboration of the <u>California Ocean Protection Council</u>, the <u>California Coastal Conservancy's</u> California Coastal and Marine Mapping Initiative, the <u>California Department of Fish and Game</u>, <u>U.S. Geological Survey</u>, and the Monterey Bay Sanctuary Foundation, and the <u>National Marine Sanctuaries</u>. Dr. Rikk Kvitek, Director of the Seafloor Mapping Lab at California State University, Monterey Bay, and Guy Cochrane of the United States Geological Survey, led the project. Project partners also include Fugro Pelagos International and Moss Landing Marine Laboratories.

The California Ocean Protection Council was established pursuant to the requirements of the <u>California Ocean Protection Act</u> that was signed into law in 2004 by <u>Governor Arnold Schwarzenegger</u>. The council consists of the <u>Secretary for Resources Mike Chrisman</u> (Chair); <u>State Lands Commission Chair</u>, <u>Lieutenant Governor John Garamendi</u>; <u>Secretary for Environmental Protection Linda Adams</u>, <u>Senator Darrell Steinberg</u> and <u>Assemblymember Pedro Nava</u>. The council will help coordinate and improve the protection and management of California's ocean and coastal resources and implement

The mission of the California Ocean Protection Council is to ensure that California maintains healthy, resilient, and productive ocean and coastal ecosystems for the benefit of current and future generations.

Established in 1976, the California Coastal Conservancy is a state agency that uses entrepreneurial techniques to purchase, protect, restore, and enhance coastal and ocean resources, and to provide access to the shore. The Conservancy works in partnership with federal, state and local governments, other public agencies, nonprofit organizations, and private landowners towards improving and protecting the spectacular natural resources of the California coast and San Francisco Bay. The Conservancy serves as the staffing agency for the Ocean Protection Council.

Available interviewees:

Ocean Protection Council

Drew Bohan, Executive Policy Officer, 916-502-7464

CA Coastal Conservancy

Sam Schuchat, Executive Officer, 510-469-4430

the Governor's 'Ocean Action Plan' released in October 2004.

NOAA National Marine Sanctuary Program

Maria Brown, Superintendent, 415-254-8747

CA State University – Monterey Bay, Seafloor Mapping Lab

Dr. Rikk Kvitek, Director, (831) 582-3529 or 831-595-8518

US Geological Survey, Coastal and Marine Geology Program

Dr. Guy Cochrane, 831-427-4754

Mavericks Surf Ventures

Mr. Doug Epstein, partner 415-786-2850 or 415-462-6200

On the Web:

CA Ocean Protection Council – http://resources.ca.gov/copc/

CA Coastal Conservancy – http://www.coastalconservancy.ca.gov/

NOAA Monterey Bay National Marine Sanctuary – http://montereybay.noaa.gov

NOAA Gulf of the Farallones National Marine Sanctuary - http://farallones.noaa.gov

CA State University-Monterey Bay, Seafloor Mapping Lab - http://seafloor.csumb.edu/

USGS Coastal and Marine Geology Program - http://marine.usgs.gov/

California State Univ. Seafloor Mapping Lab - http://seafloor.csumb.edu/

Sanctuary Integrated Monitoring Network - http://www.mbnms-simon.org

Mavericks Surf Ventures - http://www.maverickssurf.com/Home/

Fugro Pelagos, Inc. - http://www.fugro-pelagos.com/

Moss Landing Marine Labs - http://www.mlml.calstate.edu/

CA Marine Life Protection Act Implementation http://www.dfg.ca.gov/mrd/mlpa/

CA Seafloor Mapping Prorities Workshop

http://seafloor.csumb.edu/StrategicMappingWrkshp2.htm